

Growth of Til-Aqua Red NMT



*Til-Aqua International
Research & Development*

Summary

Experimental environment:

- Tankvolume 1050L
- Trickling tower Rec. system
- No addition of pure oxygen
- Different feeds: (44/10) + 38/10 + 35/8

Day	Weight (gram)	FCR
1	0,012	
108	62	
156	220	0.96
191	368	1.19
226	560	1.11

Some other field results:

Dubai Plantfarm – ongrowing with addition of pure oxygen
275 gram from 0.03 gram in 151 days with a FCR of 1.0 (Tilapia feed)

Ward Tilapia Farm – UK – only aeration
300 gram from 0.01 in 168 days with a FCR of 0.85 (Catfish feed)

Results Period 1

System / Tank	2/2	1/1	2/1	1/2	Difference between feed lines (%)
Feed treatment	TI-3 44/10	TI-3 44/10	TI-3 35/8	TI-3 35/8	/
Biomass day 0 (kg/tank)	18,1	18,4	18,8	18,8	3,24
Biomass day 48 (kg/tank)	63,7	62,3	55,0	55,9	13,5
Stocking density day 0 (kg fish/m3)	17,2	17,4	17,9	17,9	3,24
Stocking density day 48 (kg fish/m3)	60,5	59,1	52,3	53,1	13,5
Mortality (%)	0.7	0.0	0.0	0.3	/
Mean body weight day 0 (g)	62,4	63,3	64,9	64,9	3,24
Mean Body weight day 48 (g)	218,9	214,0	191,1	197,0	11,54
weight gain (g)	156,5	150,7	126,2	132,1	18,91
Feed gift (kg)	43,6	43,6	41,1	43,6	2,93
Feed conversion (FC)(kg feed/kg fish)	0,96	0,99	1,14	1,17	18,5
Relative feed rate (%BW/d)	2.67	2.68	2.67	2.83	2,76
Protein efficiency ratio (gain kg / kg protein)	2,38	2,29	2,52	2,43	6,08
Energy efficiency ratio (gain kg / energy in MJ)	0.063	0.061	0.053	0.051	18,5
Specific growth rate (% body weight/day)	2,62	2,54	2,24	2,27	14,6

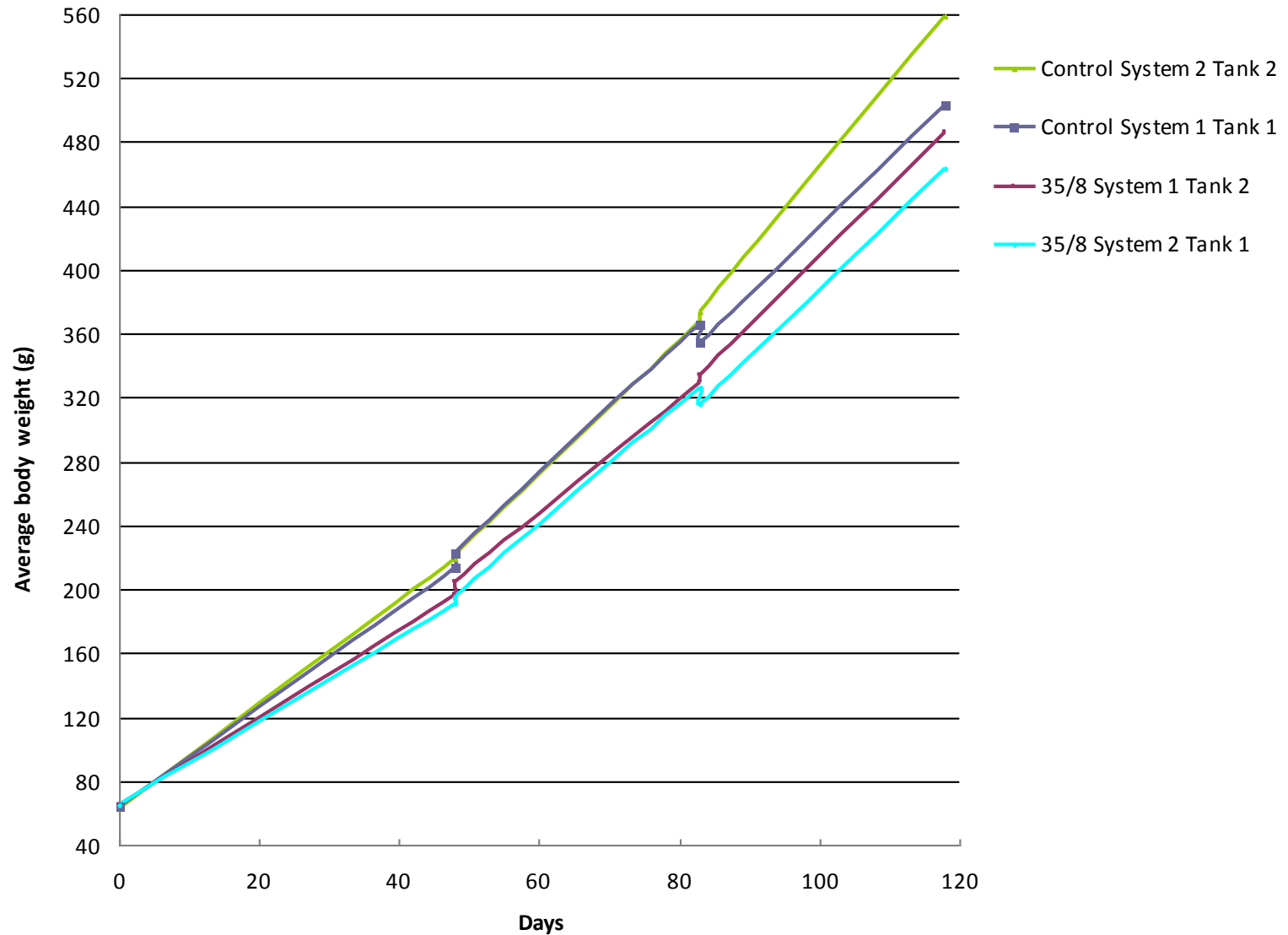
Results Period 2

System / Tank	2/2	1/1	2/1	1/2	Difference between feed lines (%)
Feed treatment	TI-4,5 38/10	TI-4,5 38/10	TI-4,5 35/8	TI-4,53 35/8	/
Biomass day 48 (kg/tank)	44,2	44,6	39,1	40,8	11,1
Biomass day 83 (kg/tank)	73,2	72,2	65,1	65,9	10,9
Stocking density day 48 (kg fish/m ³)	42,0	42,4	37,1	38,8	11,1
Stocking density day 83 (kg fish/m ³)	69,5	68,5	61,9	62,6	10,9
Mortality (%)	0.0	0.0	0.0	0.0	/
Body weight day 48 (g)	221,1	223,0	195,5	204,2	11,14
Body weight day 83 (g)	367,6	366,4	325,6	329,4	12,06
Weight gain (g)	146,4	143,4	130,2	125,2	13,49
Feed gift (kg)	34,4	34,1	34,0	34,0	0,73
Feed conversion (FC)(kg feed/kg fish)	1,19	1,24	1,31	1,36	9,80
Relative feeding rate (%BW/d)	1.73	1.73	1.93	1.87	9,70
Protein efficiency ratio (gain kg / kg protein)	2,21	2,13	2,19	2,10	1,13
Energy efficiency ratio (gain kg / energy in MJ)	0.052	0.050	0.046	0.044	11,8
Specific growth rate (% body weight/day)	1,44	1,38	1,46	1,37	0,42

Results Period 3

System / Tank	2/2	1/1	2/1	1/2	Difference between feed lines (%)
Feed treatment	TI-4,5 38/10	TI-4,5 38/10	TI-4,5 35/8	TI-4,53 35/8	/
Biomass day 83 (kg/tank)	33,7	31,9	28,5	30,1	12,0
Biomass day 118(kg/tank)	50,3	45,3	41,7	43,8	11,7
Stocking density day 83 (kg fish/m3)	32,0	30,3	27,0	28,6	12,0
Stocking density day 118 (kg fish/m3)	47,7	43,0	39,6	41,6	11,7
Mortality (%)	0.0	0.0	0.0	0.0	/
Body weight day 83 (g)	373,9	355,0	316,2	334,3	12,04
Body weight day 118 (g)	558,3	502,8	463,3	486,6	11,72
Weight gain (g)	184,4	147,9	147,0	152,3	11,03
Feed gift (kg)	18,5	16,1	17,6	17,5	1,70
Feed conversion (FC)(kg feed/kg fish)	1,11	1,21	1,33	1,28	12,46
Relative feeding rate (%BW/d)	1.28	1.21	1.46	1.38	14,00
Protein efficiency ratio ((gain kg / kg protein)	2,36	2,18	2,15	2,23	3,71
Energy efficiency ratio (gain kg / energy in MJ)	0.055	0.051	0.045	0.047	14,7
Specific growth rate (% body weight/day)	1,15	1,00	1,09	1,07	1,05

Growth



Comparison of growth (in different systems) between NMT™ and other strains of Tilapia

